

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-44. (Cancelled)

45. (New) Method for controlling the driving dynamics of a vehicle, comprising the steps of:

accepting at least one input signal relating to vehicle wheel speed,
modifying said at least one input signal based on one or more driving dynamics variables of the vehicle,
determining an existence of a loss of tire pressure in a wheel based on said one or more modified input signals, and
controlling a vehicle brake control system in response to the loss of tire pressure.

46. (New) Method as claimed in claim 45, wherein said determining step further includes generating a test quantity, PG, and comparing said test quantity to threshold values, whereby the loss of tire pressure is determined to exist when the test quantity, PG, exceeds or drops below the threshold values.

47. (New) Method as claimed in claim 46, further comprising the step of modifying one of the test quantity, PG, and the threshold value in response to the loss of tire pressure.

48. (New) Method as claimed in claim 45, further including the step of limiting a maximum speed of the vehicle by engine intervention in response to the loss of tire pressure.

49. (New) Method as claimed in claim 45, further including the step of determining a modification quantity during operation of the vehicle and storing said modification quantity in a memory.

50. (New) Method as claimed in claim 45, wherein the driving dynamics variable comprises one of a vehicle speed, a longitudinal acceleration, a yaw rate, a transverse acceleration, a steering angle, a curve characteristic quantity, a wheel acceleration, a wheel slip, a wheel slip gradient, and a tire torsion.

51. (New) Method as claimed in claim 45, wherein said controlling step changes one of a brake control nominal value, a brake response threshold, and a control algorithm of a brake system in response to the loss of tire pressure.

52. (New) Device for controlling the driving dynamics of a vehicle, comprising:
a detection device for accepting at least one vehicle wheel speed signal,
a modification device for accepting one or more driving dynamics signals,
wherein said detection device is coupled to said modification device, and wherein said modification device creates a modified input signal based on said vehicle wheel speed signal and said one or more driving dynamics signals,
wherein said detection device includes a detection element for accepting said modified input signal and for generating an output signal for controlling a vehicle brake control system in response to the loss of vehicle tire pressure.

53. (New) Device as claimed in claim 52, wherein said one or more driving dynamics signals include one of a vehicle speed, a longitudinal acceleration, a yaw rate, a transverse acceleration, a steering angle, a curve characteristic quantity, a wheel acceleration, a wheel slip, a wheel slip gradient, and a tire torsion.

54. (New) Device as claimed in claim 52, wherein said modification device further modifies said output signal according to the driving dynamics signals.

55. (New) Device as claimed in claim 52, further including a memory for storing a modification quantity that is determined during operation of the vehicle.

56. (New) Device as claimed in claim 52, wherein the output signal is compared to a threshold value, and wherein the loss of tire pressure is determined to exist when the output signal exceeds or drops below the threshold values.

57. (New) Device as claimed in claim 56, wherein one of said output signal and the threshold value is modified by said modification device in response to the loss of tire pressure.

58. (New) Device as claimed in claim 52, further including a controller for limiting a maximum speed of the vehicle by engine intervention in response to the loss of tire pressure.